



Natural Heritage &
Endangered Species
Program

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
Route 135
Westborough, MA 01581
(508) 792-7270 ext. 200

MASSACHUSETTS THREATENED SPECIES

BARRENS DAGGERMOTH

Acronicta albarufa

Family - Noctuidae

Order - Lepidoptera

Class - Insecta

DESCRIPTION: The Barrens Daggermoth is a large Holarctic genus that is hard to identify except by a specialist. Most members of the genus are gray or grayish-brown with whitish lines that are often double. Most species have black dashes or 'daggers' on the forewings. Many species of daggermoths are polymorphic with light forms and darkforms, or exhibit gradation from light to dark.

RANGE: This species was historically scattered from Massachusetts and Ontario to New Mexico and North Carolina, although it has been extirpated in several states.

DISTRIBUTION IN MASSACHUSETTS: Although this species was once common in Middlesex County and on Martha's Vineyard, it is presently known only from Plymouth and Martha's Vineyard.

HABITAT: This moth occurs in dry oak dominated sites such as scrub oak barrens or other oak-pine scrub. The larval food plant is apparently scrub oak in New England.

LIFE HISTORY AND ECOLOGY: Females lay eggs on scrub oak leaves in early August. In other areas the species is known to use black oak. The eggs hatch soon after laying and mature until late September, when pupation occurs in the soil with a flimsy cocoon.

POPULATION STATUS: The Barrens Daggermoth is listed as State Threatened in Massachusetts due to its limited population in the state and its declining populations in other areas, although it appears to be secure in the Ozarks of Missouri. Threats to its habitat include habitat fragmentation, development, aerial spraying for insect pests, and fire suppression.

RECOMMENDATIONS: Current populations should be monitored and searches made for new populations. Maintenance and protection of pine barrens habitat should also be considered.

REFERENCES: SCHWEITZER, D. 1982. Acronicta albarufa, Element Abstract, Massachusetts Natural Heritage Program, 7 pp.

Rings, Roy et al. 1992. The Owlet Moths of Ohio. Ohio Biol. Survey Bull., New Series 9(2): 219 .